

## Butler County

### Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

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Using the most recent IMPLAN data available (2014) adjusted for 2016, 20 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Butler County economy.<sup>1</sup>

These 20 sectors have a total direct output of approximately **\$399 million** and support **2,323.8 jobs** in Butler County. Running the model for all 20 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Butler County Economy						
Impact Type <sup>2</sup>	Employment	% Employment	Total Value Added <sup>3</sup>	Total Value Added % of Gross Regional Product <sup>4</sup>	Output <sup>5</sup>	Output % of Gross Regional Product
Direct Effect	2,323.8	6.96%	\$200,309,659.01	8.63%	\$398,994,984.44	17.19%
Indirect Effect	718.8	2.15%	\$16,540,808.74	0.71%	\$44,581,698.14	1.92%
Induced Effect	442.5	1.33%	\$27,201,300.34	1.17%	\$50,776,424.10	2.19%
<b>Total Effect</b>	<b>3,485.0</b>	<b>10.44%</b>	<b>\$244,051,768.08</b>	<b>10.51%</b>	<b>\$494,353,106.69</b>	<b>21.30%</b>

As shown in the above table, agriculture, food, and food processing sectors support **3,485 jobs**, or **10.44%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$494.4 million**, roughly **21.30% of the economy**.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 20 agriculture, food, and food processing sectors is approximately **\$244.1 million**, or **10.51% of the GRP**. This indicates that personal income, business income, and taxes generated by these sectors account for **10.51% of the total economy**.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting:

[http://www.implan.com/index.php?option=com\\_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70](http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70)

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value added = labor income + indirect business taxes + other property type income.

<sup>4</sup> GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

<sup>5</sup> Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **1,254.1 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Butler County.

Top Ten Sectors by Employment		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	1254.1	\$215,383,117.22
Support activities for agriculture and forestry	511.2	\$9,523,679.04
Landscape and horticultural services	466.3	\$21,748,973.36
Veterinary services	166.1	\$14,496,601.92
Animal production, except cattle and poultry and eggs	106.4	\$17,191,204.03
Real estate	84.4	\$7,422,152.14
Grain farming	77.3	\$42,845,632.14
All other crop farming	63.2	\$7,413,823.39
Commercial logging	54.7	\$2,605,287.40
Limited-service restaurants	39.0	\$3,022,313.28

The beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector directly contributes approximately **\$215.4 million** to the Butler County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry..

Top Ten Sectors by Output		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	1254.1	\$215,383,117.22
Grain farming	77.3	\$42,845,632.14
Fertilizer mixing	18.7	\$23,276,382.61
Landscape and horticultural services	466.3	\$21,748,973.36
Dairy cattle and milk production	38.8	\$19,258,455.24
Oilseed farming	9.9	\$17,472,393.64
Animal production, except cattle and poultry and eggs	106.4	\$17,191,204.03
Veterinary services	166.1	\$14,496,601.92
Owner-occupied dwellings	0.0	\$11,082,042.23
Petroleum refineries	1.2	\$10,650,804.96

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Butler County economy.

<b>All Agriculture, Food, and Food Processing Sectors</b>		
<b>Sector</b>	<b>Total Employment</b>	<b>Total Output</b>
Oilseed farming	9.9	\$17,472,393.64
Grain farming	77.3	\$42,845,632.14
Vegetable and melon farming	0.3	\$81,538.39
Fruit farming	2.4	\$292,177.30
Tree nut farming	0.0	\$5,203.12
Greenhouse, nursery, and floriculture production	3.4	\$674,971.90
Cotton farming	0.4	\$129,835.73
All other crop farming	63.2	\$7,413,823.39
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	1254.1	\$215,383,117.22
Dairy cattle and milk production	38.8	\$19,258,455.24
Poultry and egg production	1.1	\$1,080,529.57
Animal production, except cattle and poultry and eggs	106.4	\$17,191,204.03
Commercial logging	54.7	\$2,605,287.40
Animal, except poultry, slaughtering	12.1	\$7,725,777.32
Bread and bakery product, except frozen, manufacturing	33.3	\$3,815,044.96
Frozen cakes and other pastries manufacturing	2.2	\$335,993.51
Wineries	13.0	\$3,414,354.22
Fertilizer mixing	18.7	\$23,276,382.61
Veterinary services	166.1	\$14,496,601.92
Landscape and horticultural services	466.3	\$21,748,973.36

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Butler County, the retail sector was omitted.